

REMARKS

Discussion of Claim Amendments

Claims 20-22 have been amended to include a reference to the amount of the polymerization inhibitor. The amended claims are fully supported by the original claims and the specification, e.g., page 8, lines 9-11. No new matter has been added.

Discussion of Rejections

Claims 20-22 are rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over Nojiri et al. (U.S. Patent 6,329,111) in view of Taylor et al. (U.S. Patent 5,371,148) and Tanaka et al. (U.S. Patent 5,858,616). Claims 20-22 are rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over Tanaka '616 in view of Taylor '148 and Koike et al. (U.S. Patent 5,922,395). Applicant respectfully traverses the rejections.

The Office Action states that the resin composition in Nojiri '111 and Tanaka '616 become the same as that in the present invention by eliminating the photoinitiator from the resin composition, based on the description of Taylor '148.

Although applicant disagrees with the rejections, applicant has amended the claims. The cited references, either alone or in combination, fail to suggest to those of ordinary skill in the art the presently claimed invention.

As discussed at page 8, lines 11 to 15 of the specification, when the polymerization inhibitor (d) in the resin composition (A) layer is less than 0.1 part by weight, satisfactory pattern of fluorescent substance cannot be obtained due to photo polymerization as a result of the migration of the photo polymerization initiator from the photosensitive resin composition (B) into the resin composition layer (A). The present invention, therefore, actively attempts to prevent photo polymerization of the resin composition (A) layer, even if migration of the initiator does not occur.

Nojiri '111 and Tanaka '616 do not describe that 0.1 to 15 parts by weight of a polymerization inhibitor based on 100 parts by weight of the acrylic polymer are included in the resin composition layer. In Nojiri '111 and Tanaka '616, in contrast to the presently claimed invention, the resin composition layer is photo polymerized. The polymerization

inhibitor in Nojiri 111 and Tanaka '616 is intended to be added in an extremely small amount for storage stability of the resin composition layer.

Therefore, Nojiri '111 and Tanaka '616 cannot become the present invention by eliminating the photoinitiator from the resin composition.

A critical aspect of the presently claimed invention is that a specified amount of polymerization inhibitor is used in layer A. There is no suggestion in the cited art that a polymerization inhibitor can be used in layer A in the recited amount. Specifically, there is no suggestion to those of ordinary skill in the art in Nojiri '111 or Tanaka '616, which recommend placing the inhibitor in photosensitive layer, to place the inhibitor in resin layer A. If such a suggestion is inferred by hindsight, hindsight is impermissible under the law.

The Office Action states that the experimental data of the Declaration filed on November 13, 2002 do not demonstrate the superiority of the present invention, because the experiments in the Declaration do not use a polymerization inhibitor. Applicant respectfully submits that the Declaration contains experimental data which supports (though not explicitly) the proposition that an inhibitor in layer A is significant and advantageous.

If exposure to light, development, and baking are conducted immediately after the resin composition (A) layer and photosensitive resin composition (B) layer are formed inside the cell, the experimental results are the same whether a polymerization inhibitor (d) is used or not. Such is the case in the experiments of the Declaration and therefore, the experimental results of the Declaration are equivalent to results obtained if a polymerization inhibitor (d) is used.

Therefore, according to the experimental results of the Declaration, compared to when the resin composition (A) layer is photo polymerized (when an initiator is used), a more favorable fluorescent pattern can be obtained when the resin composition (A) layer is not photo polymerized (when an initiator is not used or when an inhibitor is used).

Moreover, if the resin composition (A) layer and a photosensitive resin composition (B) layer are exposed to light, are developed, and are baked after passing a long period from the time they are provided inside the cell, the resin composition (A) will be easily hardened, and then the formed pattern of fluorescent substance will have defects of pattern by the migration of the photoinitiator from am photosensitive resin composition (B) layer to the

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resin composition (A) layer. Therefore, the presence of inhibitor (d) in the resin composition (A) layer is significant in the present invention.

In the present invention, because a photo polymerization initiator is not added and 0.1 to 15 parts by weight of a polymerization inhibitor (d) based on 100 parts by weight of the acrylic polymer are added to the resin composition (A) layer, photo polymerization of the resin composition (A) layer is actively prevented, although a compound containing at least one ethylenically unsaturated group is included. As a result, a favorable fluorescent pattern can be obtained.

Therefore, the present invention is clearly more advantageous than the disclosures of the cited references.

In view of the foregoing, it is respectfully submitted that claims 20-22 are patentable over the cited references.

Conclusion

The application is considered in good and proper form for allowance. If, in the opinion of the Examiner, a telephone conference would expedite the prosecution of the subject application, the Examiner is invited to call the undersigned attorney.

Respectfully submitted,



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